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DSSD Census 2000 Dress Rehearsal Memorandum Series, Chapter-S-RE-01

MEMORANDUM FOR	Robert W. Marx Chief, Geography Division
From:	Howard Hogan *Howard Hogan* Chief, Decennial Statistical Studies Division
Subject:	Request for Dress Rehearsal Surrounding Block Files for Accuracy and Coverage Evaluation Research
Prepared by:	Glenn Wolfgang Decennial Statistical Studies Division

1   Introduction

Dress rehearsal has shown considerable gain in the precision and accuracy of DSE estimates when extending search for matches (to both ICM and census nonmatches) into surrounding blocks . This extended search has usually been limited in the past to only blocks touching at least at one point. That is called the first ring of surrounding blocks. Additional blocks may be included in the extended search if they provide sufficient gains in match and correct enumeration rates.

The present research is conducted to assess how much gain might be possible by extending the search not just to one ring, but to a second ring, those blocks touching the first ring at least at one point, excluding sample cluster blocks and other first ring blocks. To evaluate the contribution of the second ring, one approach might be to simply search inside all second rings for more matches for both ICM and census cases. That approach would take much time and many resources. The alternative on which this research is based works backward from a set of newly identified possible matches to see if a valuable number occur in the second ring.

The additional matches were identified by matching research done in Population Division. For each ICM nonmatch, a search was conducted across the site for another record with the (nearly) exact name and date of birth. Some of those matches may not be true matches and some true matches may be missed, but the good matches should show up with equal likelihood across all blocks. Also, duplicates to census cases are not identified in this data. Each of these possible match records has a census block number assigned to it. This is called the target block.

The research, in essence, identifies whether the sample and target blocks share a first ring surrounding block between them. That would mean the target block is in the second ring of the

sample cluster. The proportion of second ring links compared to first ring links and more distant links will provide a view of how worthwhile a contribution second ring search would make.

Please direct any questions about these requirements to
Glenn Wolfgang (email: Glenn.S.Wolfgang@ccmail.census.gov).

2   Assumptions

Specifications for generating surrounding block research files are based on these underlying assumptions:

2.1   The first ring of blocks surrounding a sample cluster is understood to include all blocks, excluding that sample cluster's blocks, that have boundaries which touch the sample cluster at least at one point.

2.2   Similarly, the first ring of blocks surrounding a target block is understood to include all blocks that have boundaries which touch the target block at least at one point.

2.3   For the purpose of this research, water blocks should be included in the first ring of surrounding blocks for either sample clusters or target blocks.

2.4   For the purpose of this research, surrounding blocks that crossover into other TIGER partitions are desired but not essential.

2.5   References to the term "cluster" denote the number assigned specifically to a sample cluster by the DSCMO sample selection programs rather than to the cluster ID provided by GEO as input to those selection programs. These cluster numbers are unique across all dress rehearsal sites.

3   Input Files

The following files, sorted by CLUST, will be used/provided.

3.1   List of Dress Rehearsal sample block clusters already available in GEO.

3.2   List of target blocks supplied by DSSD. A note field carries along one or more associated cluster numbers to ease later processing in DSSD. The format is:

Variable	Description	Location
STATE	Target state	1-2
COUNTY	Target county	3-5
TRGTBLK	Target block number	7-11
TRGTSUF	Target block suffix	12
NOTE	Cluster list	14-30

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4 Output

Use the algorithm that identifies surrounding blocks (first ring only) to generate the following. Several records are generated for each cluster or target block record in the input.

4.1 For each block adjoining a Dress Rehearsal sample block cluster, GEO will return a record in the format:

Variable	Description	Location
SURRST	State of SURRBLK	1-2
SURRCOU	County of SURRBLK	3-5
SURRBLK	Surrounding block number	14-18
SURRSUF	Surrounding block suffix	19
MISSBLK	= 1 if some surrounding blocks are missing for this cluster	21
CLUST	Cluster	23-28

4.2 For each block adjoining a target block, GEO will return a record in the format:

Variable	Description	Location
STATE	Target state	1-2
COUNTY	Target county	3-5
TRGTBLK	Target block number	7-11
TRGTSUF	Target block suffix	12
SURRST	Surrounding block state	14-15
SURRCOU	Surrounding block county	16-18
SURRBLK	Surrounding block number	20-24
SURRSUF	Surrounding block suffix	25
MISSBLK	= 1 if some surrounding blocks are missing for this cluster	27
NOTE	Cluster list	29-45

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